

Welcome to the first issue of QuarTerS!

It has been almost one year since Timex and SYNC dropped out of the T-S world. Since many of you depended on them to keep you informed you lost track of the T-S community. The T-S is still going strong and many publications and suppliers exist-you just have to know where to look. QuarTerS will bring you back in touch with the T-S community.

This issue is being mailed out to thousands of lost T-S users. We have acquired mailing lists from many sources. This issue is crammed with T-S suppliers and publications, as well as quite a bit of information on using your T-S. Future issues will contain a minimum of four product reviews and many programming tips, articles and programs of interest to all.

We need your help! The most important thing for you to do right now is to send in your \$8.00 for a one year subscription. We also need articles, reviews, programs, tips, and most important IDEAS! Tell us what you want to see. We will try our best to help.

The next time you go into a computer store tell them you want to see T-S products on their shelves. By spreading the word you can help the T-S survive. Hope to hear from you and that you will be reading the next issue of QuarTerS.

Best of luck in the New Year!

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Please tell our advertisers you saw their ad in QuarTerS. T-S dealers Please write us for our advertising rates.

## NEW PRODUCT NEWS

This column will list new T-S related Products. We do not endorse any Product appearing here.

ROMSWITCH-\$54.95  
Russell Electronics  
RD 1 Box 539  
Centre Hall, PA 16828  
(814)364-1325

The ROMSWITCH has been out for a few months now, but many of you may not have heard of it. The ROMSWITCH allows the TS2068 to switch from the TS2068 ROM to the SPECTRUM ROM. The SPECTRUM ROM allows the TS2068 to run thousands of SPECTRUM Programs. The SPECTRUM is Sinclair's version of the TS2068. Many SPECTRUM titles are available, see the dealer list in this issue. Carried by many fine hardware and software dealers.

DLS BUYERS GUIDE-\$20.00  
D. LIPINSKI SOFTWARE  
2737 Susquehanna Rd  
Roslyn, PA 19001

A Guide to all T-S related Products is Put together in one easy to use binder. Update to current Guide sent to all purchasers during the first quarter of 1985. Quarters will review this in the next issue. See ad this issue for further information.

A & J MICRO DRIVE-\$199.95

With the use of the A & J MICRO DRIVE your TS2068 will SAVE and LOAD 20 times faster than using a cassette recorder, that's Pretty fast. We have not seen one of these but it Promises to improve your computer's capabilities. Available through many hardware dealers, see list in this issue.

TS2068 QUICKSILVA LINE  
Manufactured by:  
KNIGHTED COMPUTERS  
707 Highland St  
Fulton, NY 13069  
(315)593-8219

Knighted Computers now manufactures all TS2068 Quicksilva Programs. The

line has also been increased to include the following titles: TRAXX, VELNOR'S LAIR, LASER ZONE, THE SNOWMAN, TRADER, GRIDRUNNER, STARFIRE, AQUAPLANE, GHOST TOWN, ROBBER, THE ISLAND, QUETZALCOATL and LOSI. This line is carried by many fine software dealers.

TEXTWRITER SERIES  
Robert Fingerle  
39639 Embarcadero  
Fremont, CA 94538

The excellent word Processing series of Programs has increased. It now includes the TEXTWRITER 64 and the TEXTWRITER PLUS 64, \$24.95 and \$29.95, respectively. The TW64 is for the TS2068 and 32 column Printer. The TW+64 is for the TS2068 with the HERCUL Parallel interface attached to a full sized Printer. Available through many software dealers.

FASTFILE-\$19.95  
Tom E. Cole  
1314 Speight-15  
Waco, TX 76706

The FASTFILE is a Professional data management system for the TS1000 with 16K. For more details see ad in this issue. FASTFILE will be reviewed in the next issue of Quarters.

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MANUFACTURERS and DISTRIBUTORS: Send us information on any new Products or better yet send us the Product for a review by Quarters. Any Product sent will be returned undamaged if requested. Each Product will appear only once in this column, the rest depends on your advertising manager.

SUBSCRIBE  
TO  
QUARTERS

# TIMEX-SINCLAIR BASIC

(Part 1)

by

Bill Johnson

This is the first in many articles dealing with various programming techniques with the Timex-Sinclair computers.

This article will deal with saving memory. In other words packing more into less. How many times have you spent hours typing in a program just to have an error code 4 POP-UP and say "out of room." This can be annoying to say the least.

One way to save memory is to change DIM statements. Decreasing the dimensions of a string can save alot of memory. Lets say that you had a program with a string of last names. The string was set by DIM N\$(100,32). This string would allow 100 names 32 letters long. Unless you know alot of people with very long names this is a waste of memory. Redimension N\$(100,15). This will save 1700 bytes of memory.

Another way to save is in PRINT statements. If you have the following types of lines in your program you are wasting space:

```
10 PRINT AT 0,2;"* M E N U *"
20 PRINT AT 2,2;"1. ENTER
INFORMATION."
30 PRINT AT 4,2;"2. VIEW
SPREADSHEET."
40 PRINT AT 6,2;"3. PRINTOUT
INFORMATION."
50 PRINT AT 8,5;"INPUT
APPROPRIATE NUMBER"
```

This program will printout a MENU of actions to be taken. It looks nice but is wasting alot of space. This version will provide the same without using as much space:

```
10 PRINT AT 0,10;"*MENU*";, TAB
2;"1. ENTER INFORMATION.",, TAB
2;"2.VIEW SPREADSHEET.",, TAB 2;"3.
PRINTOUT INFORMATION.",, TAB
5;"INPUT APPROPRIATE NUMBER"
```

The only problem with putting all print info on one line is when you

have to EDIT. The cursor moves very slowly on a line of this length. You can even go further in saving memory. Do your PRINT statements have to be so wordy? These following lines will accomplish the same purpose with a large saving in memory:

```
10 PRINT "1-ENTER 2-VIEW
3-PRINT"
```

If the program is for yourself the above would be fine. But, if the program will be used by other people it may not be appropriate. It will not appear to be User-Friendly.

The use of the INKEY\$ function is a nice way of inputting information. But it too wastes space. After the above programs an INKEY\$ routine to direct the program may be the following:

```
100 IF INKEY$="1" THEN GOTO
1000
110 IF INKEY$="2" THEN GOTO
2000
120 IF INKEY$="3" THEN GOTO
3000
130 GOTO 100
```

This routine is nice to use because an incorrect number can not be input. But, it also wastes space. A space saving routine would be:

```
110 INPUT Q
120 GOTO Q*1000
```

This would work just as well even though it is not as User Friendly as the INKEY\$ routine. A wrong number can be INPUT, which can result in a break in the program. To protect from this the following line could be inserted:

```
130 IF Q<1000 or Q>2000 OR
Q<3000 THEN GOTO 110
```

Next time we will discuss other memory saving techniques.

-----  
If you have any BASIC topics that you would like to have discussed Please send them to us.

## T-S PUBLICATIONS

Many of you have lost track of the T-S world of computers after some Publications folded, such as SYNC. We have compiled a list of existing Publications that are devoted solely to the T-S line of computers or cover the T-S computer. We have also given our impression of each. Here's the list in alphabetical order:

### COMPUTER TRADER MAGAZINE

1704 Sam Drive  
Birmingham, AL 35235  
13 issues for \$12  
Sample copy \$2.50

This monthly magazine covers many computers and also supports radio hackers. The largest portion of this magazine covers T-S computers with articles from various authors. The December 1984 issue had nine articles on the T-S's. Each issue is around 100 pages. We recommend CTM.

### FAMILY COMPUTING

PO Box 2512  
Boulder, CO 80321  
12 issues \$17.97  
Available on newsstands

This monthly magazine is also a general interest magazine. It covers many computers and normally has 3 or 4 T-S Programs. This Publication is geared toward the entire family, with the K-Power section for the kids. We recommend this magazine.

### S U M

3224 NW 30th Ave  
Gainesville, FL 32605  
6 issues \$6.00  
12 issues \$12

This monthly magazine was originally the newsletter for the Gainesville Timex Users Group. Each issue normally has 3 or 4 Program reviews, a hardware series, and other T-S topics. We recommend this magazine.

### SYNCWARE

P. O. Box 64  
Jefferson, NH 03583  
6 issues \$16.95

This bi-monthly magazine is devoted

to the technical side of the T-S computers. It normally has articles on machine language programming, hardware projects, basic programming, reviews, etc. We recommend this Publication.

### SYNTAX

Harvard, MA 01451-0667  
12 issues \$48.00  
6 issues \$27.00

This monthly magazine has been around since the first Sinclair's hit the USA. It has excellent articles of interest to all T-S users. We hate to do this but we can not recommend SYNTAX until they show more reliability. SYNTAX seems to have hit hard times. We subscribed to SYNTAX in August 1984 and have only received one issue, Sept. 1984. The high subscription rates may have chased many of its readers away. If we start receiving issues on a more reliable basis we will let you know.

### T-S HORIZONS

2002 Summit St  
Portsmouth, OH 45662  
12 issues \$15

This monthly magazine covers all aspects of T-S computers and is an excellent way to keep in touch with the T-S world of computers. We recommend this magazine.

### QuarTers

4 issues \$8.00

Since you are now reading QuarTers we will let you be the judge. Let us know what you think and what you would like to see. Of course we recommend this quarterly magazine.

Subscriptions to all the above recommended magazines would only cost about \$80.00 per year. If you want a sample of a magazine before you send in for a yearly subscription write the magazine and they will send you information.

So you thought the Timex-Sinclair computer world was dead. Now you know how to keep it alive-Please support the above Publications.

**TIMEX TIPS**  
by Chuck Dawson

This is intended to be a collection of useful tips and techniques either not mentioned in the manual or not fully explained. I welcome any Timex Tips that you may have discovered and would like to share with others. After all, that is why we form user organizations—to share knowledge and pick up ideas from others.

**QUESTION:** I recently used a 2068 Program that said somewhere near the beginning, "All inputs should be in CAPITAL letter." Is there a way that I can turn on the CAPS LOCK from within a Program and avoid similar statements?

**ANSWER:** Yes, just add a statement near the beginning of your Program: POKE 23658,8. This will turn on the CAPS LOCK and any subsequent inputs will be in capital letters. To turn off the CAPS LOCK just POKE 23658,0.

**QUESTION:** How can I restart the computer without turning off the power and then back on?

**ANSWER:** Just type in RANDOMIZEUSR 0. This will initialize the computer (even RAMTOP) just as when it is first powered up.

**QUESTION:** I was translating a TS1000 basic Program to work on my new TS2068. Every line was the same except for a SCROLL. I can't find the SCROLL command on the 2068. Help!

**ANSWER:** The 2068 automatically scrolls when the printing would otherwise go off the bottom of the screen. If the screen gets full the Program stops with the PROMPT SCROLL? at the bottom of the screen. Any key except "n" will cause another screen full of data to be displayed. In some TS1000 Programs this will work just fine and you can skip the SCROLLS. However, if you really want the 2068 to scroll up one line put RANDOMIZEUSR 2361 in place of SCROLL when translating the Program.

**QUESTION:** If a Program was saved to

auto-run when loaded can I get it to load without running?

**ANSWER:** Yes and No. It depends on which model you have. If you have the ZX81, TS1000 or TS1500 the answer is no. The Program will begin to run as soon as loading is finished. If you have the 2068 then the answer is yes. All you have to do is a NEW and then MERGE ". With no other Program in memory, no merging will take place but the auto-run feature is disabled.

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Chuck Dawson is a member of the TSUG of Fort Worth Texas. If you have any tips or questions that you would like answered please write Chuck ZWMJ Data Systems. We may not be able to print all replies so please include a SASE for a personal answer.

## IT'S FAST IN SLOW MODE INCREDIBLE IN FAST MODE

THE BEST FILING PROGRAM FOR YOUR ZX81, TS1000,  
TS1500 OR YOUR MONEY BACK

### INTRODUCING **FASTFILE**

PROFESSIONAL DATA MANAGEMENT SYSTEM

*Holds more data than you ever thought possible!*

Written in lightning fast 100% machine code. Built in word processor allows easy data entry. 4 data types stores more information in less memory. Add, change, delete, LPrint, search and query are all as easy as pointing your finger. Several different kinds of files can be in memory at the same time. Complete query system answers "How many...?", "How much...?" or "Which..." type questions. Includes an example checkbook program which can store 400 checks in 16K! Manual includes information on how to create coupon/refund files, mailing labels, inventory control, address book, appointment scheduler/calendar and your own files.

To order send \$19.95 plus \$2.00 P&H for cassette and manual. Tom E. Cole, 1314 Speight #15, Waco, TX 76706.  
Texans add local tax.

## KEY TO REVIEWS

Excellent: 8-10

Good: 5-7

Poor: Under 5

**RATING:** Average of other ratings.

**PERFORMANCE:** Rating of Programs capabilities.

**EASE OF USE:** How quickly the user can learn to use the Program.

**RELIABILITY:** Consistency of results.

**DOCUMENTATION:** Quality of Printed instructions.

**USER GROUPS:** Average of ratings by various User Groups; if available.

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The above key should provide a consistent basis on which to judge T-S Products.

## REVIEW

by  
Bill Johnson

**DESCRIPTION:** Bugaboo

**TYPE:** Game

**AUTHOR:** Indescomp-Quicksilver

**MANUFACTURED BY:**

Knighted Computers

707 Highland ST

Fulton, New York 13069

**AVAILABILITY:**

Many software dealers or directly from Knighted Computers.

**REQUIREMENTS:** TS2068

**PRICE:** \$22.95

**PRINTERS SUPPORTED:** None

**WARRANTY:** 90 days

**RATING:** 8.8

**PERFORMANCE:** 9

**EASE OF USE:** 10

**RELIABILITY:** 9

**DOCUMENTATION:** 7-in Program

**USER GROUPS:** 9

**REMARKS:** Not being a Game Player I was skeptical of the premise of a flea jumping around my computer monitor. Once the game loaded and after I read the instructions I began to play. The game has excellent graphics and the life like appearance of the flea is amazing. When the flea gets ready to jump his knees bend and then he straightens his legs and jumps, very life like. The game can become addictive. The game is very easy to play but almost impossible to accomplish. I still have not been able to jump my way out of the cave and was amazed when my 10 year old niece, after playing the game for about 30 minutes, leaped out of the cave to safety. A game that will be enjoyed by all ages and a great way to show off your TS2068. I highly recommend Bugaboo.

\*6\*

## COMMODORE 64 TIMEX-SINCLAIR

WE CARRY MANY LINES OF SOFTWARE FOR THE COMMODORE 64 AND FOR THE COMPLETE LINE OF TIMEX-SINCLAIR COMPUTERS

### TIED OF THROWAWAY SOFTWARE? TAX RETURN ORGANIZER

Most tax Programs can only be used once by a computerized taxpayer. The TAX RETURN ORGANIZER is different. The TRO consists of four programs which help the taxpayer organize his tax records. Since the TRO does not follow the forever changing tax forms it can be used year after year. The TRO was written by an accountant with the average taxpayer in mind.

Commodore 64 cass-\$20 disk-\$25  
TS1000-1500-ZX81 cass-\$18  
TS2068 cass-\$20

Postage prepaid N.Y. residents add sales tax.  
C.O.D. add \$3.00

FREE CATALOG-SPECIFY COMPUTER  
WML DATA SYSTEMS  
4 BUTTERFLY DRIVE  
HAUPPAUGE, NEW YORK 11788

## DEALER CATALOGS

The following is a list of catalogs we have received from various Timex-Sinclair hardware and software dealers. This list will be updated each issue. Each dealer will only appear here one time. When you write tell them you saw them in Quarters.

We have broken the dealers down into two categories:

### SOFTWARE ONLY

These dealers carry software only. Some may also carry other items which are not T-S specific, such as Printers, cassettes, etc. Others may carry software related items such as loading filters, Spectrum ROMs, etc.

BANTA SOFTWARE  
8008 Highwood Way  
Orangevale, CA 95662  
(916)722-4895

BIOCAL SOFTWARE  
167 Wilson ST  
Petaluma, CA 94952

ROBERT FINGERLE  
39639 Embarcadero Tr  
Fremont, CA 94538  
TS2068 only

JRC SOFTWARE  
PO Box 448  
Scottsburg, IN 47170  
1-812-752-5106

D. LIPINSKI SOFTWARE  
2737 Susquehanna RD  
Roslyn, PA 19001

SHARP'S  
127 Nine Mile RD  
Sandston, VA 23150  
(804)737-4895

2-BIT SOFTWARE  
PO Box 2036  
Del Mar, CA 92014  
(619)481-3629  
TS1000 2K ONLY

URS  
PO Box 612  
Haddonfield, NJ 08033

WMJ DATA SYSTEMS  
4 Butterfly DR  
Hauppauge, NY 11788  
(516)543-5252

THOMAS B. WOODS  
PO Box 64  
Jefferson, NH 03583  
(603)586-7734

### HARDWARE AND SOFTWARE

These dealers carry both T-S specific hardware and software.

AERCO  
Box 18093  
Austin, TX 78760  
(512)451-5874  
T-S interfaces only

CURRY COMPUTERS  
5344 West Banff LN  
Glendale, AZ 85306  
1-602-978-2902

KNIGHTED COMPUTERS  
707 Highland ST  
Fulton, NY 13069  
(315)593-8219  
TS2068 only

RUSSELL ELECTRONICS  
RD 1, Box 539  
Centre Hall, PA 16828  
1-814-364-1325

SINCLAIR RESEARCH LTD  
50 Staniford ST  
Boston, MA 02114  
(617)742-4826  
Sinclair QL only

TORONTO SOFTWARE  
PO Box 84  
Aincourt, Ontario M1S 3B4  
Canada

ZEBRA SYSTEMS  
78-06 Jamaica Ave  
Woodhaven, NY 11421  
(718)296-2385

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HELP US SURVIVE

VISA PROGRAM  
by Chuck Dawson

This TS2068 VISA Program keeps track of charges made on your charge card. Each time you use the card enter the data into the Program and it keeps a running total as well as producing a printout of where your money has gone.

Enter the Program as listed and GOTO 40. This is the only time you should GOTO 40. From now on GOTO 1 to keep from clearing the Previous data. Enter the name of the store where the purchase was made and the amount. Entries are numbered by the machine and will be used to delete the entry when it has been Paid. A Printout on the 2040 Printer can be Produced at anytime by entering the word "LPRINT" instead of a store. To save the Program enter "SAVE" at the store Prompt.

When the monthly bill comes in some charges will be listed and others will still be outstanding. Find each item listed in the bill and by entering the item number each can be deleted from the list. This is done by Pressing ENTER at the store Prompt without typing anything on the input line. The Prompt will change to read: "ENTER ITEM # TO DELETE." When the appropriate item number is entered the list will be reprinted on the screen and a new total shown. This can be repeated for each item on the bill. Now only the outstanding items are left and can be added to throughout the month as other charges are made. This way you know how much you owe at any time.

A word might be order about the "CHR\$ 8" that appears several times in the Program. In order to Print the dollars and cents, including the ".00" when even dollars occur, the ".00" is Printed first and the Print Position is moved back to the left several Positions by "CHR\$ 8." Then the dollars and cents are Printed. If there are odd cents they overprint the ".00"; however, if the entry is even dollars, only the whole number is Printed but the ".00" already Printed fills out the cents Position.

Other schemes do the same thing but this one seems to be faster, which is important in long lists like occur in this Program.

```

10> REM VISA
14 OVER 0
15 BORDER 1
16 PAPER 1: INK 9
20 POKE 23658,8: CLS
30 GO TO 80
40 DIM A$(55,10)
50 DIM S(55)
60 LET N=0
80 PRINT "N STORE AMOU
NT TOTAL"
90 LET T=0
100 FOR I=1 TO N
120 LET T=S(I)+T
130 PRINT I;TAB 4;A$(I);TAB 19;
".00";CHR$ 8;CHR$ 8;CHR$ 8;CHR$
8;CHR$ 8;CHR$ 8;CHR$ 8;
138 PRINT TAB (16+(S(I)<10)+(S(
I)<100));S(I);
140 PRINT CHR$ 9;CHR$ 9;CHR$ 9;
TAB 20;"00";CHR$ 8;CHR$ 8;CHR$
8;CHR$ 8;CHR$ 8;CHR$ 8;TA
B (24+(T<10)+(T<100)+(T<1000));T
150 NEXT I
160 INPUT "Enter store ";C$
180 IF C$="SAVE" THEN GO TO 300
190 IF N=54 OR C$=" STOP " THEN
STOP
200 IF C$="" THEN GO TO 300
205 IF C$="LPRINT" THEN GO TO 4
00
210 LET N=N+1
220 LET A$(N)=C$
230 INPUT "Enter Amount ";S(N)
250 GO TO 1
300 INPUT "ENTER ITEM # TO DELE
TE ";I
320 FOR I=1 TO N
330 LET A$(I)=A$(I+1)
340 LET S(I)=S(I+1)
350 NEXT I
360>LET N=N-1
370 GO TO 1
380 SAVE "VISA" LINE 1
390 GO TO 160
400 LPRINT "N STORE AMO
UNT TOTAL"
410 LET T=0
420 FOR I=1 TO N
430 LET T=S(I)+T

```



```

440 LPRINT I;TAB 4;A$(I);TAB 19
;"00";CHR$ 8;CHR$ 8;CHR$ 8;CHR$
8;CHR$ 8;CHR$ 8;CHR$ 8;
445 LPRINT TAB (16+(S(I)<10))+ (S
(I)<100));S(I);
450 LPRINT CHR$ 9;CHR$ 9;CHR$ 9
;TAB 28;"00";CHR$ 8;CHR$ 8;CHR$
8;CHR$ 8;CHR$ 8;CHR$ 8;CHR$ 8;T
AB (24+(T<10)+(T<100)+(T<1000));
T
460 NEXT I
470 GO TO 160

```

EDITOR'S NOTE: The above Program is for use with the TS2068 and a TS2040 Printer. It may work on other Printers. If your Printer has automatic line feed after every LPRINT you may have to disable it for the Program to LPRINT

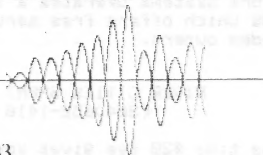
correctly. See your Printer manual for complete details.

The Program should work on a TS1000, TS1500 or ZX81 by changing the following:

1. Delete lines 14, 15, and 16.
2. Change line 20 to: CLS.
3. Change all references to CHR\$ 8 to CHR\$ 114. These are the CHR\$ codes for left cursor.
4. Change all references to CHR\$ 9 to CHR\$ 115. These are the CHR\$ codes for right cursor.
5. Change line 380 to SAVE "VISA" and add line 385 GOTO 1.

With the above changes the Program should run. Bill.

# SyncWare News



P.O. Box 64  
Jefferson, NH 03583  
Telephone: 603-586-7734

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City/St/Zip \_\_\_\_\_  
Payment \_\_\_\_\_  
( ) check ( ) VISA ( ) Master Card  
Card # \_\_\_\_\_ Expires \_\_\_\_\_

- ( ) Send me 1 year of SYNCWARE NEWS!  
Enclosed is \$16.95  
( ) I want the BEST of SYNCWARE vol.1  
All of last year in one big volume.  
ONLY \$16.95

Do you find yourself looking for good, solid information for your Timex Sinclair computer? Do you want to know what makes it tick? Are you looking for new software, books, hardware or better yet, slicker ways to do your own programming? A YES answer to any of these questions is reason enough to subscribe to the SyncWare News. SWN is not a newsletter, but it is a journal for your machine. We try to explain the logic behind algorithms and not just give a program listing. We have advanced and beginning tutorials in a variety of areas. Our format is changing and upgrading, to provide easier, more appealing reading for everyone. If you're wary of wasting your money, \$2.00 will bring a sample issue for your perusal. We at SWN like our new direction, and we are sure that you'll agree.

Do you have a program or product for sale? Would you like to tell others about a service that you can perform? Drop us a line and we will tell others.

## Subscribe!

1 year (6 issues)

## \$ 16.95

Add \$3 a year in Canada; all other foreign add \$5 per year.

## MODEM COMMUNICATIONS

The following is a list of services available to modem users. These all are either T-S specific or have T-S related sections.

### SINCLAIR INFORMATION NETWORK

This network can be accessed via:

THE SOURCE - BCR632

COMPUSERVE - 74216,1245

Leave message stating that you would like to join SIN and state type of equipment. Information will be sent approximately once a week via service.

### ZEBRA SYSTEMS

(718)296-2229

Weekdays 5:30PM to 9:00AM

Zebra Systems operates a T-S specific BBS which offers free service to all modem owners.

### RIVER CITIES SMART BBS

(304)652-1416

One time \$20 fee gives you unlimited access to this BBS. Contact: Bill Ferrebee, 115 North 7th Ave, Paden City, WV 26159.

### ONLINE

1-800-438-2438

A toll-free BBS with a T-S section. Hours: Monday-Thursday 6PM to 1AM, 6PM Friday to 6AM Sunday. Eastern Time. Hours may have changed.

If you know of a BBS that has a T-S section send us the details and we will print it in the next issue.

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PLEASE SUBSCRIBE TO Quarters

DO IT NOW - DON'T DELAY

## TS1000 TIPS Compiled by Bill Johnson

The following are tips for using your ZX81-TS1000-TS1500. Remember that the above computers are all compatible.

These tips consists of ways to improve your programs and understanding of your TS1000. If you have any TS1000 tips please write and let us know.

### HIDDEN LISTING

1 REM X

Make the above the first line of your program. Enter directly POKE 16514,118. Now all that appears is 1 REM. The program can still be listed by entering LIST 2. Bring back to normal by POKE 16514,0.

FIRST LINE = 0

If you would like the first line of your program to be numbered 0 instead of 1 do the following: POKE 16510,0. To bring back to normal POKE 16510,1.

SAVE 20 SECONDS WITH 16K

If you wish to reduce your SAVING and LOADING time POKE 16389,0 and POKE 16389,128. This works with most programs.

Another way to save a lot of time is if you only need the program and not the data or variables in memory is to CLEAR before saving. This can save minutes. Be sure that you don't need the data.

### PROGRAMS THAT AUTO-RUN

If you wish a program to auto-run do the following:

9998 SAVE "NAME"  
9999 RUN

Enter GOTO 9998 to save your program. When it is loaded it will now run automatically.

If you wish for the program to auto-run without destroying data in

memory stored in memory you must use the GOTO command. Change line 9999 from RUN to GOTO. Your Program should GOTO the Portion of the Program which will continue from the last time used. If your Program has a menu this is the Place to GOTO. Remember that any time you use the commands RUN, NEW or CLEAR all data in memory is destroyed.

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Once again if you have any tips for the TS1000 send them in and we will Pass them on to our readers.  
Thanks!!!

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TELL OUR ADVERTISERS THAT YOU SAW THEIR AD IN Quarters.

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## DLS BUYERS GUIDE TO SINCALIR - TIMEX PRODUCTS & SERVICES

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FOR

ZX-80	ZX-81	SPECTRUM	QL
TS-1000	TS-1500	TS-2068	

We have attempted to contact over 1000 possible suppliers of products and services for these computers. The data we received is arranged so that it may easily be updated. The indexes are used to enable you to find and compare possible product choices. Comprehensive category list is invaluable in your search of a product. Price: \$20.00 (US) postpaid includes the update that's scheduled for the first quarter of 1985. Check Money Order, VISA or MASTERCARD. Sorry no COD. Stamped addressed legal envelope for complete details and a catalogue of EDUCATIONAL, BUSINESS and PERSONAL software plus our new hardware and supplies section.

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## TS2068 TIPS Compiled by Bill Johnson

The following are tips for improving the use of your TS2068. If you have any tips Please send them to Quarters.

### KEYBOARD SOUND

To make your keyboard noisy enter the following: PUKE 23609,X. X can be any number from 0 to 255. Anytime a key is Pressed a sound will be heard. The command can be Put it to your Programs.

### THE SCREENS WITHOUT COPY

You may want to COPY a screen without using the COPY command. You may only want the first ten lines of the screen copied. Here is a little Program that can be altered to your own needs.

```
10 FOR I=0 TO 21
20 FOR X=0 TO 31
30 LPRINT SCREEN$(I,X);
40 NEXT X
50 NEXT I
```

The TS2068 screen consists of 22 lines numbered 0 to 21, see line 10, and 32 columns numbered 0 to 31, see line 20. In order to COPY only a Portion of the screen change the line 10 and 20 figures. The SCREEN\$ command does not recognize all of the T-S characters. A good Project for next time is to determine which characters it does recognize. How about a little Program to determine which characters SCREEN\$ will recognize. Write one and send it in for the next issue.

# USER GROUPS WE HAVE HEARD FROM

The following is a list of User Groups that either send us their newsletter or have sent information. If you are a member of a User Group send us the details of your group and we will print it in the next available issue. We want to help you grow. Please tell your members about Quarters we thank you in advance.

## CALIFORNIA:

PENINSULA UG  
George Mockridge  
263 Gateway No. 107  
Pacific, CA 94044  
(415)359-3198

EAST BAY 280 UG  
Joel Brady  
3807 Elston  
Oakland, CA 94602  
(415)531-6566 or 234-3310

SILICON VALLEY S-T UG  
Rita Carr  
PO Box 4139  
Santa Clara, CA 95054  
(408)738-2888 x4536

The three user groups listed above jointly publish TIMELINEZ. Annual dues: \$15.00. TIMELINEZ, PO Box 1312, Pacifica, CA 94044.

## FLORIDA:

GAINESVILLE TUG

Write to SUM listed in the T-S PUBLICATIONS section of this issue.

## NEW YORK:

Long Island Sinclair Timex  
PO Box 438  
CenterPort, NY 11721

## NORTH CAROLINA:

TRIANGLE SINCLAIR UG  
XDoug Dewey  
206 James St  
Carrboro, NC 27510

## PENNSYLVANIA:

CENTRAL PENN TS COMPUTER UG  
XRobert Neil  
1525 N. Ashwicken CT  
State College, PA 16801

## TEXAS:

TSUG OF FORT WORTH, TEXAS  
XTim L. Ward  
8300 Calmont #406  
Fort Worth, TX 76116  
(817)244-9408

ABILENE TSUG  
XChristopher C. Nystrom  
609 E. N. 18th ST  
Abilene, TX 79601

## CANADA:

TSUG OF VANCOUVER  
PO Box 788  
New Westminster, BC V3L 4Z8  
Bob Lussier: 522-7015

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#### MUSIC LIBRARY (A Great hobby base) TS1000-\$14 \*TS2068-\$16

This Program allows you to store three lines of information on items of music (sheet music, records, tapes, etc.). The 1000 version holds 100 items and the 2068 version holds 300 items. There are routines for adding, deleting or correcting information. Please see the review of the MUSIC LIBRARY on the inside cover of this catalog.

#### PHONE BOOK TS1000-\$14 \*TS2068-\$16

This Program allows you to list the name, address and Phone number for 90 People on the 1000 version and 275 People on the 2068 version. There are routines for adding, deleting or correcting information, for alphabetizing names, and for searching for all entries except for street address and Phone number. There is a routine for Printing to the screen or to a Printer, with a simple modification you can Print mailing labels without Phone numbers. Other ways of modifying this Program are included.

#### MEMBERSHIP DIRECTORY TS1000-\$14 \*TS2068-\$16

In any club or association, it is important not only to keep up-to-date records on the members names, addresses, telephone numbers, and the last date the dues were Paid, but it is also important to know something of the special interests of the members. Obviously, there is no reason to organize a special meeting on a topic that none of the members are interested in. Therefore, included in this Program are user assignable codes for the interests of the members. Nine numbers (areas of interest) are available, and four of these numbers can be entered into the Program. There are routines for adding, deleting or correcting member information, for alphabetizing names, for searching for all entries except for street address and Phone number, and for Printing the information to the screen or to a Printer. The 1000 version holds 70 records and the 2068 version holds 250 records.

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